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# ***Measuring Social Norms Using Ecological Momentary Assessment***

**Tina Jahnel<sup>a</sup>, Stuart Ferguson<sup>a</sup>, Saul Shiffman<sup>b</sup>, Johannes Thrul<sup>c</sup>,  
Benjamin Schüz<sup>d,a</sup>**

<sup>a</sup>University of Tasmania, Australia

<sup>b</sup>University of Pittsburgh, USA

<sup>c</sup>John Hopkins Bloomberg School of Public Health, USA

<sup>d</sup>University of Bremen, Germany

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# Conflict of Interest

Funding: Grant R01-DA020742 (PI: Shiffman) from the U.S. National Institutes of Health, National Institute on Drug Abuse.

Dr. Shiffman provides consulting services on tobacco harm minimization (including nicotine replacement therapy and digital vapor products) to subsidiaries of Reynolds American Inc.

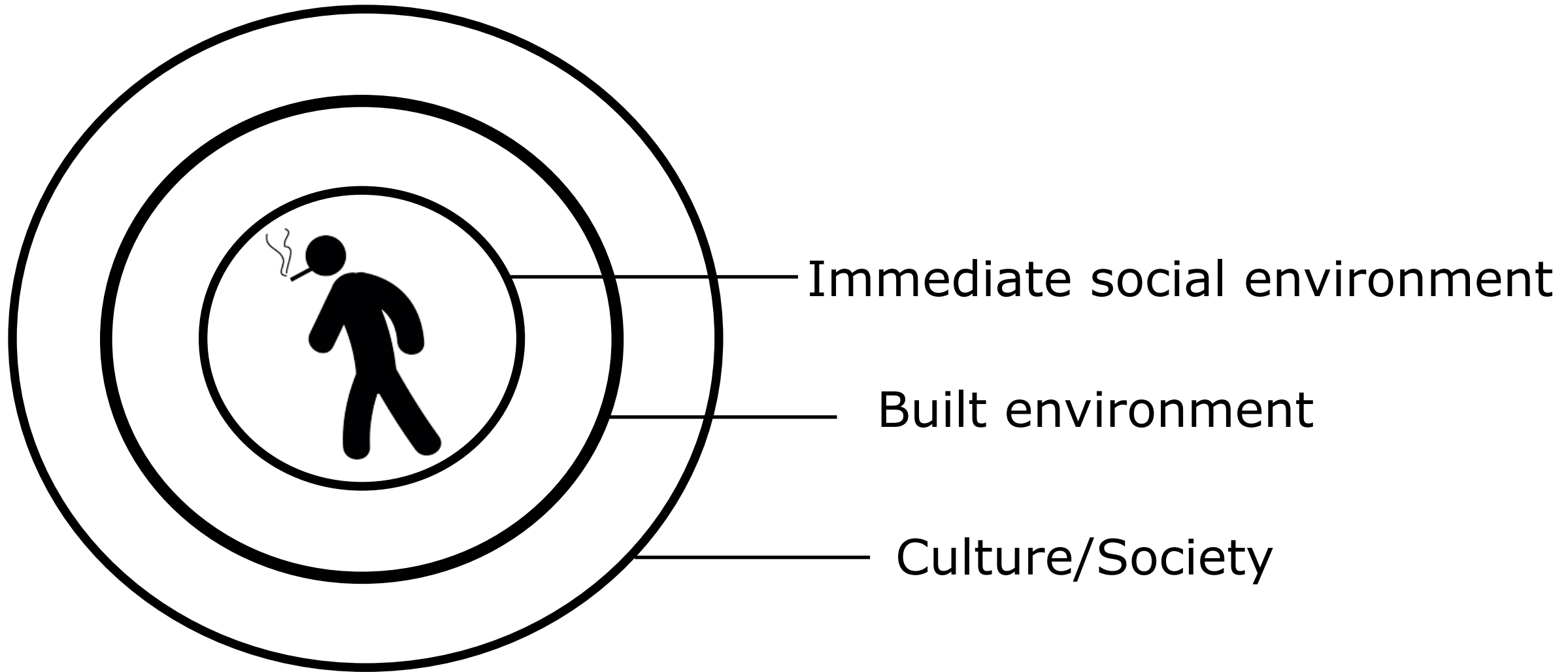
Stuart G Ferguson has worked as a consultant for pharmaceutical companies on matters relating to smoking cessation.

All other authors declare that they have no conflicts of interest.

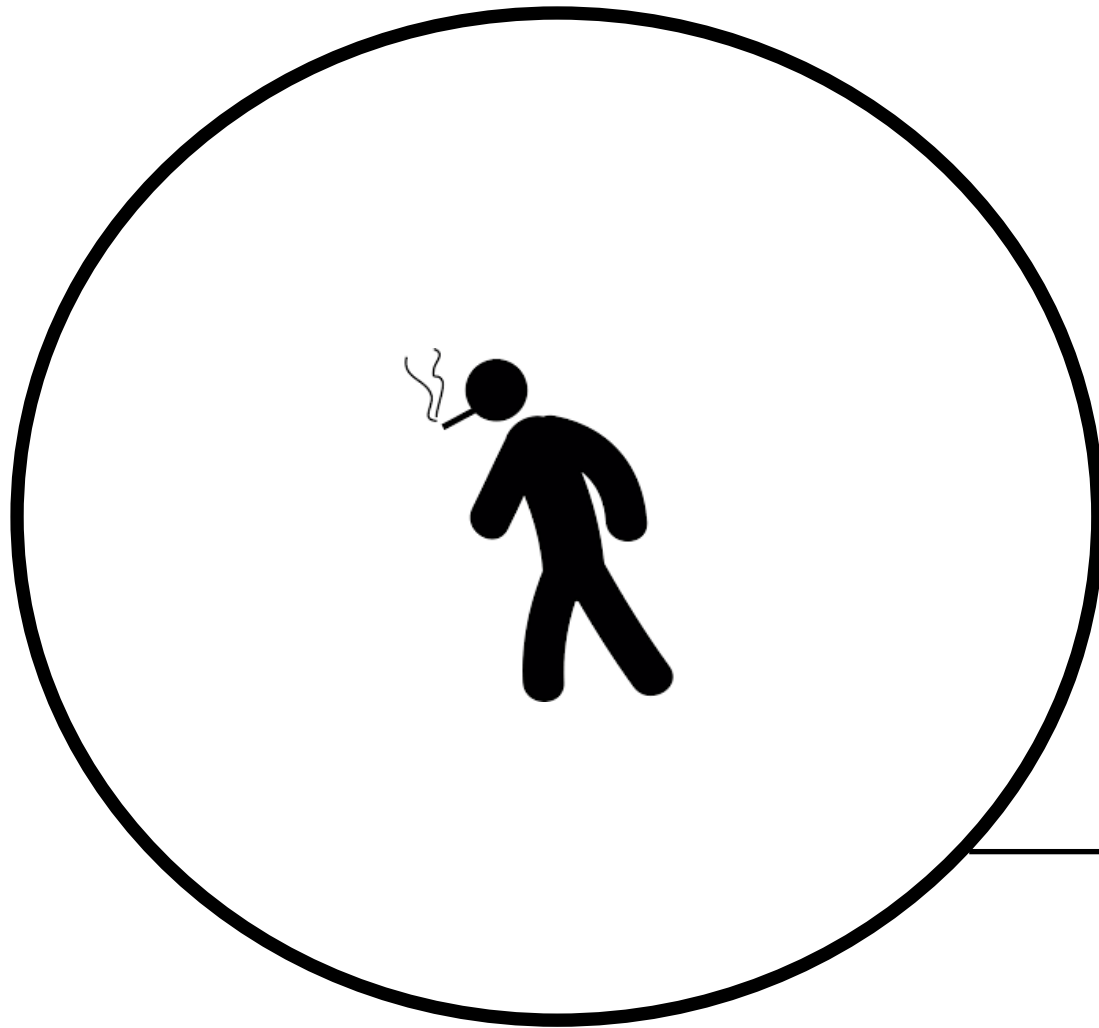
# Social Norms

- many definitions of social norms
- generally measured as relatively stable over time
- What if social norms change from moment to moment?
- Does this have implications on smoking?

# A Socio-ecological Model of Behavior

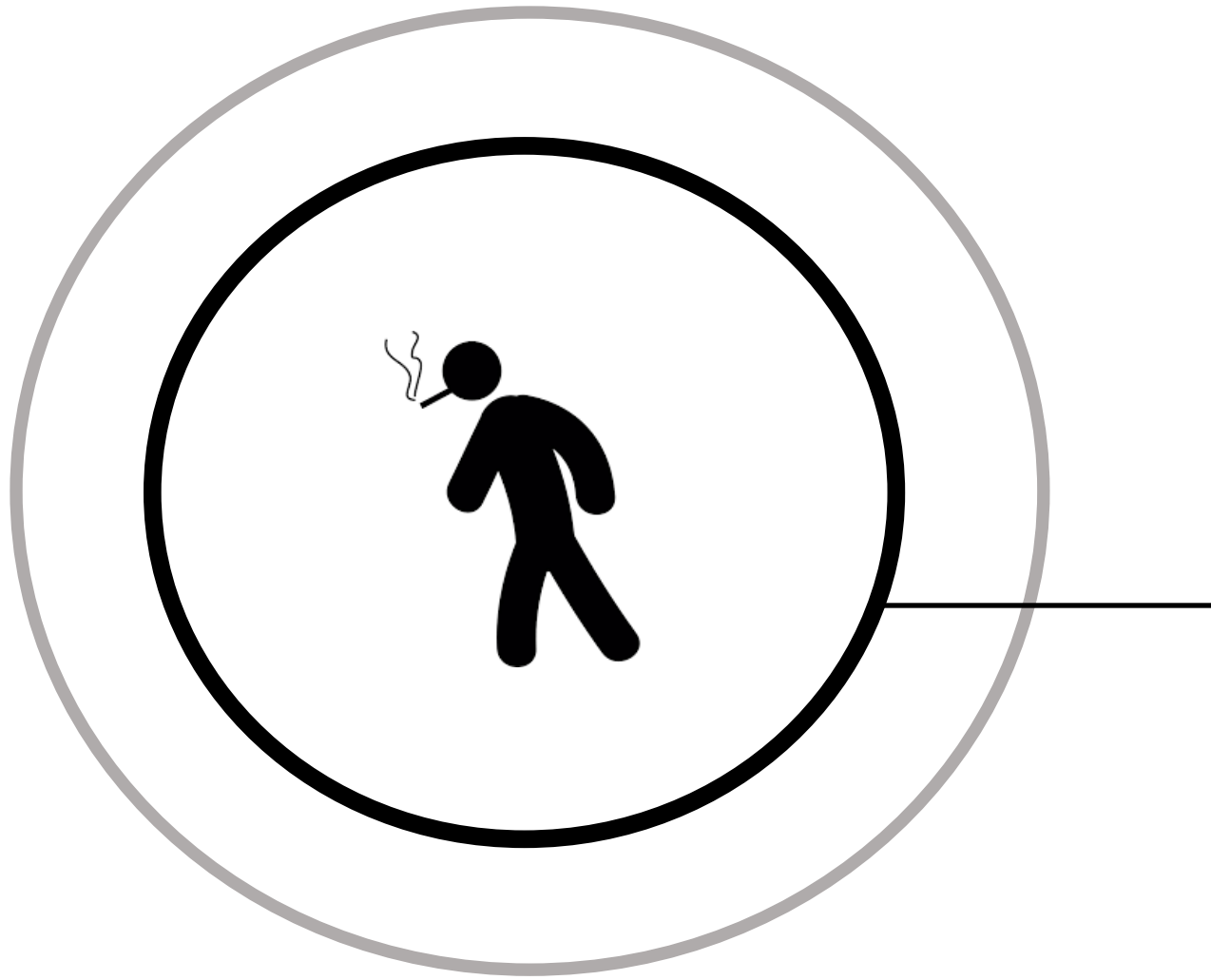


# A Socio-ecological Model of Behavior



Culture/Society

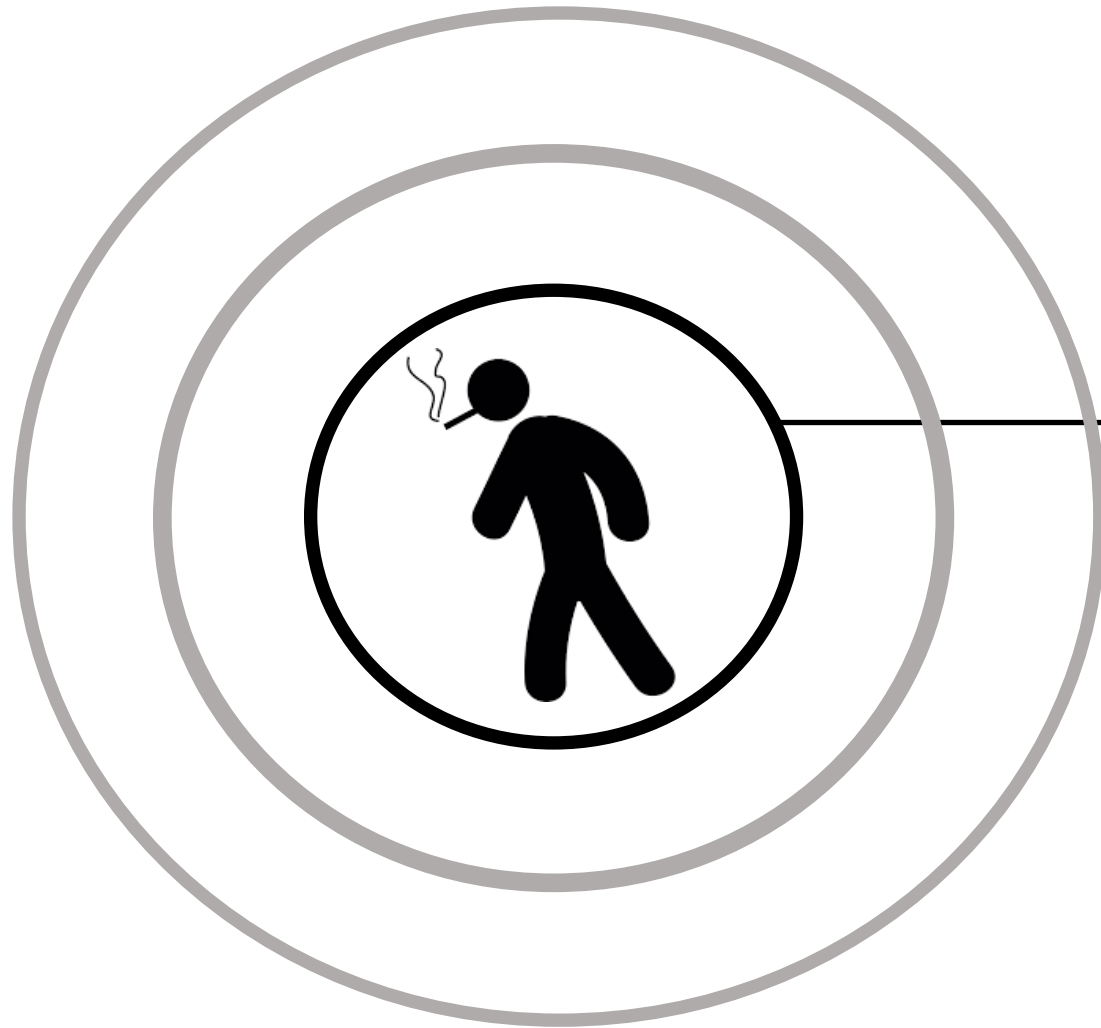
# A Socio-ecological Model of Behavior



Built environment



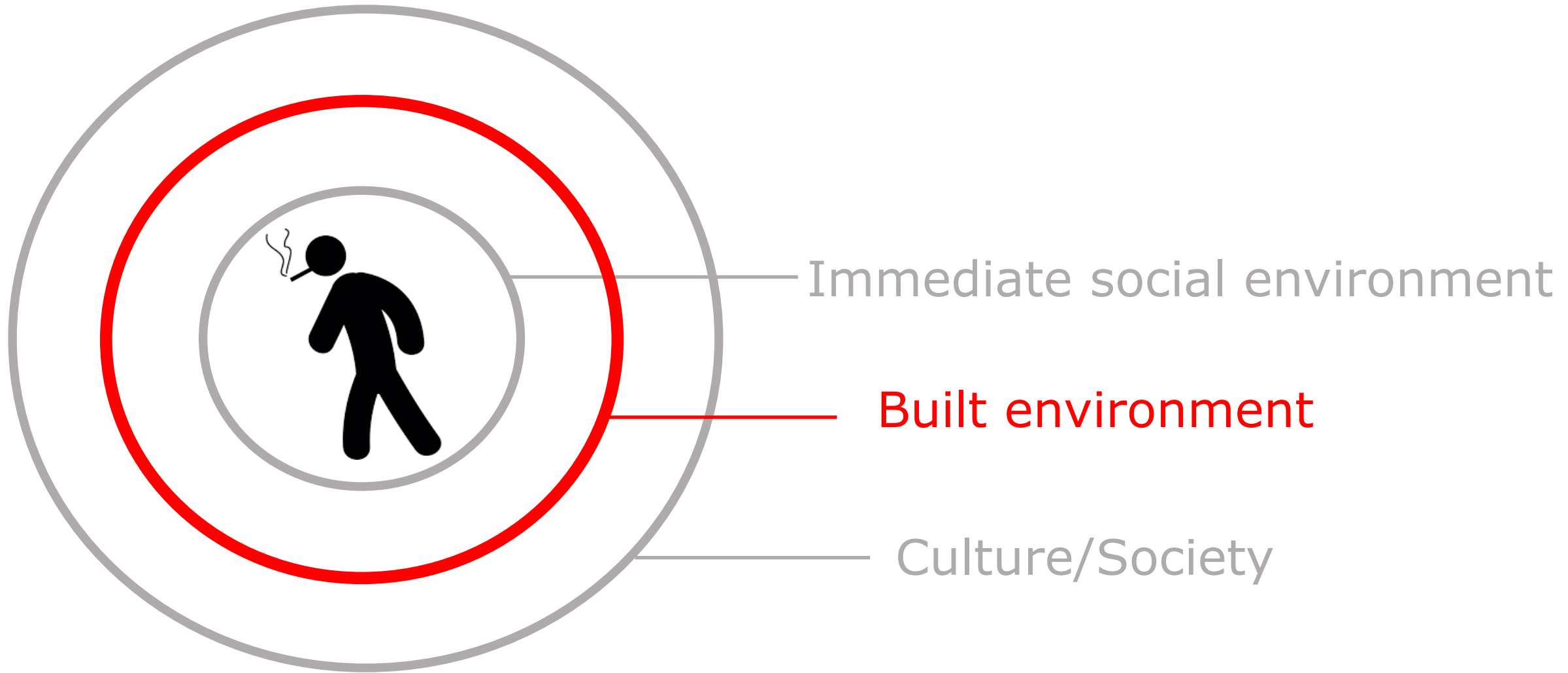
# A Socio-ecological Model of Behavior



Immediate social environment



# A Socio-ecological Model of Behavior





# Using EMA to Examine the Influence of Momentary Environments on Smoking



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## Addictive Behaviors

journal homepage: [www.elsevier.com/locate/addictbeh](http://www.elsevier.com/locate/addictbeh)



## Momentary smoking context as a mediator of the relationship between SES and smoking

Tina Jahnel<sup>a,\*</sup>, Stuart G. Ferguson<sup>a</sup>, Saul Shiffman<sup>b</sup>, Johannes Thrul<sup>c</sup>, Benjamin Schüz<sup>a,d</sup>

<sup>a</sup> School of Medicine, University of Tasmania, Private Bag 34, Hobart, Tas 7001, Australia

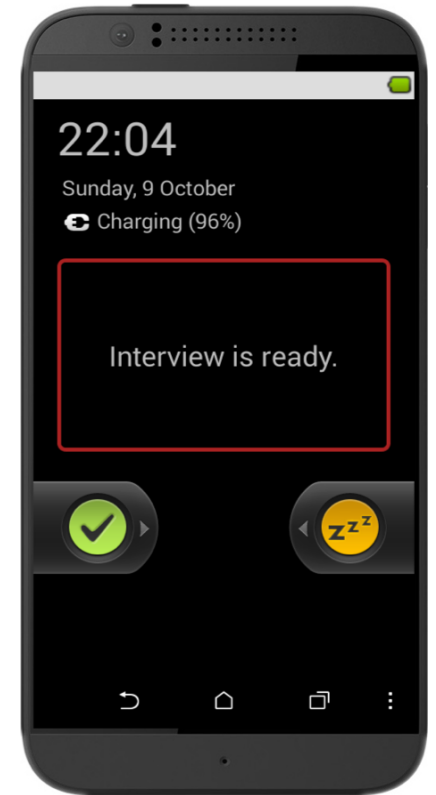
<sup>b</sup> Department of Psychology, University of Pittsburgh, 130 N. Bellefield Avenue, Suite 510, Pittsburgh, PA 15213, USA

<sup>c</sup> Department of Mental Health, Johns Hopkins Bloomberg School of Public Health, 624 N. Broadway, Baltimore, MD 21205, USA

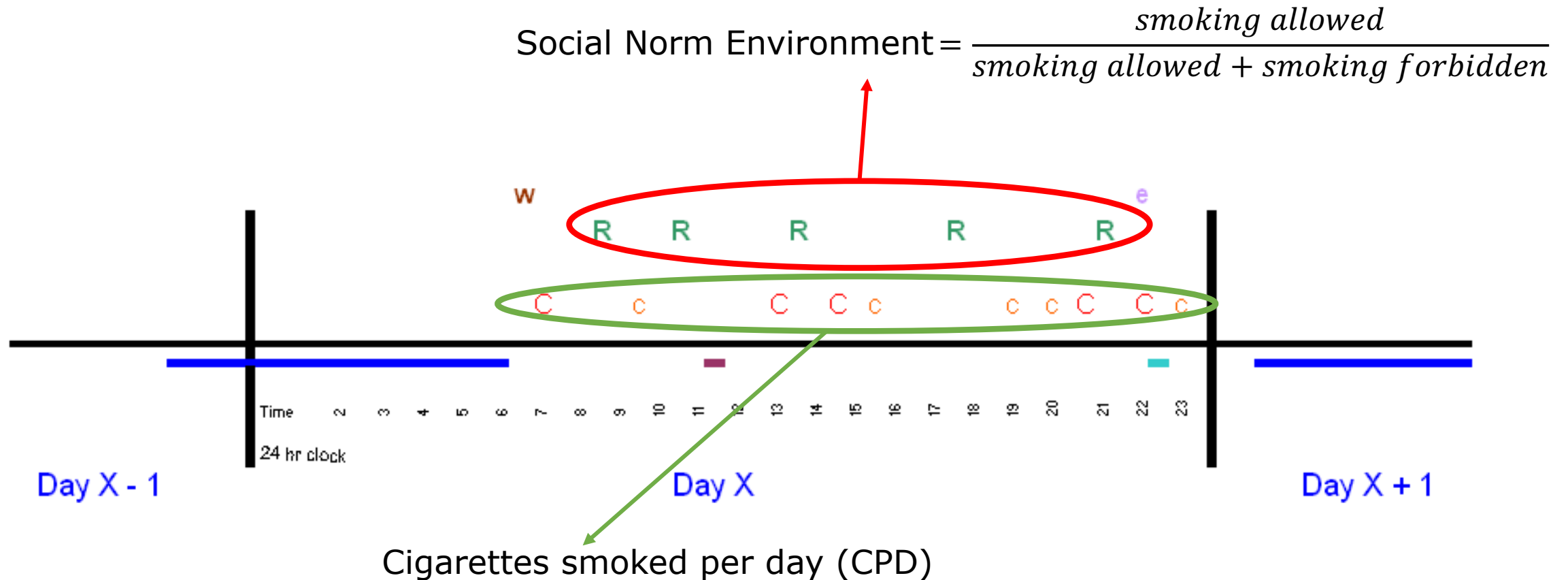
<sup>d</sup> IPP Institute for Public Health and Nursing Research, University of Bremen, Grazer Str. 2, 28359 Bremen, Germany

# Getting Closer to The Real-world: Ecological Momentary Assessment

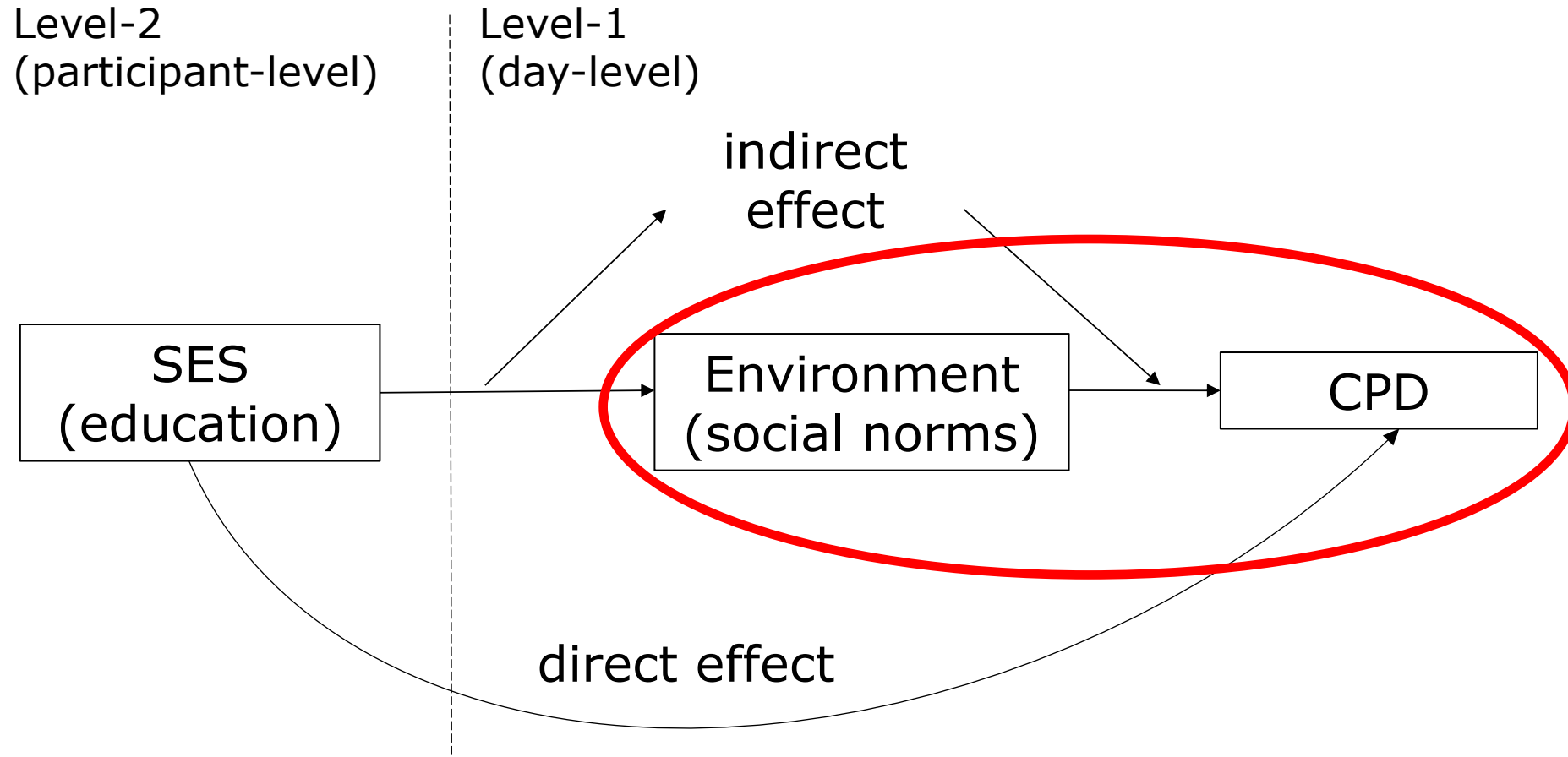
- Examine within-person processes
- Repeated assessments
- Real-time (avoiding biases assoc. with recall)
- Real-world (more ecologically valid)



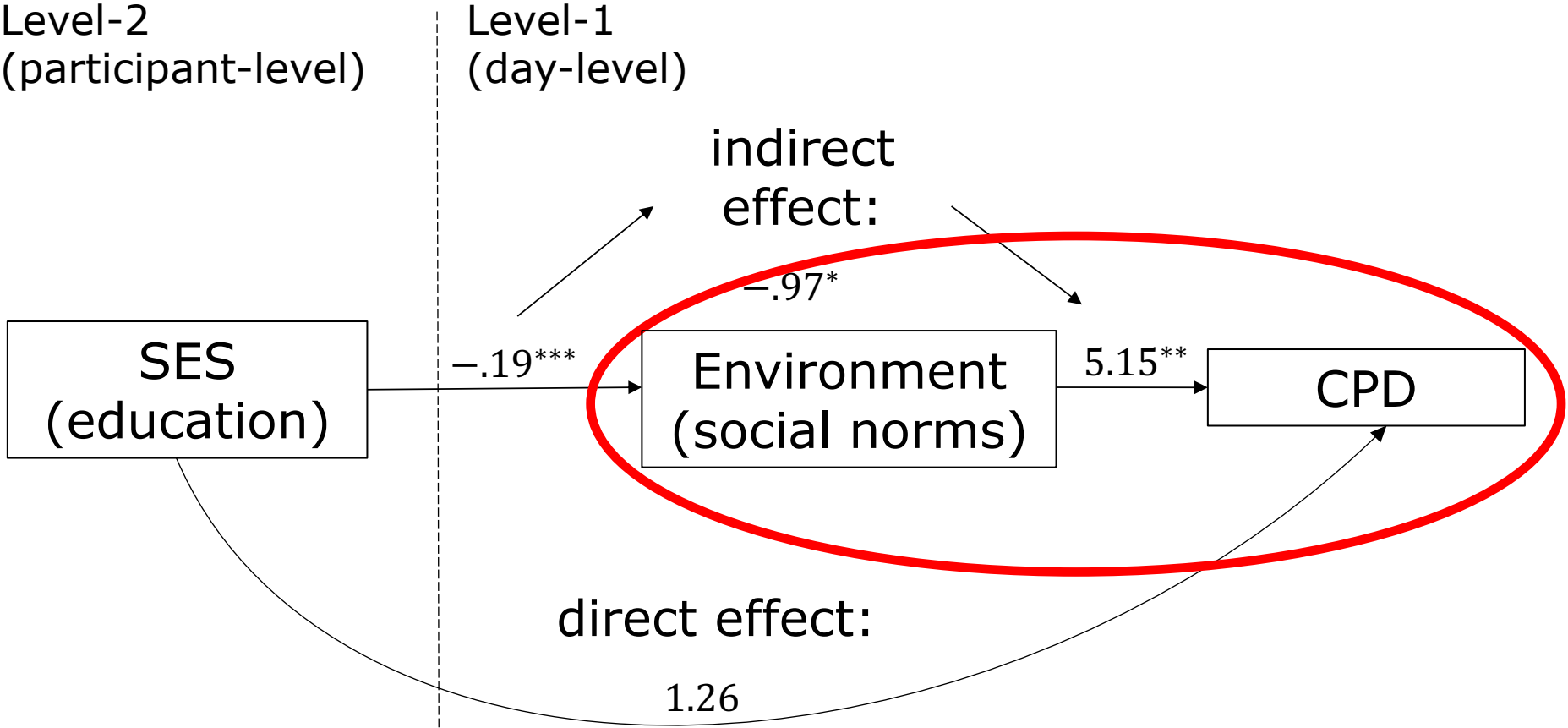
# Getting Closer to The Real-world: Ecological Momentary Assessment



# Results



# Results



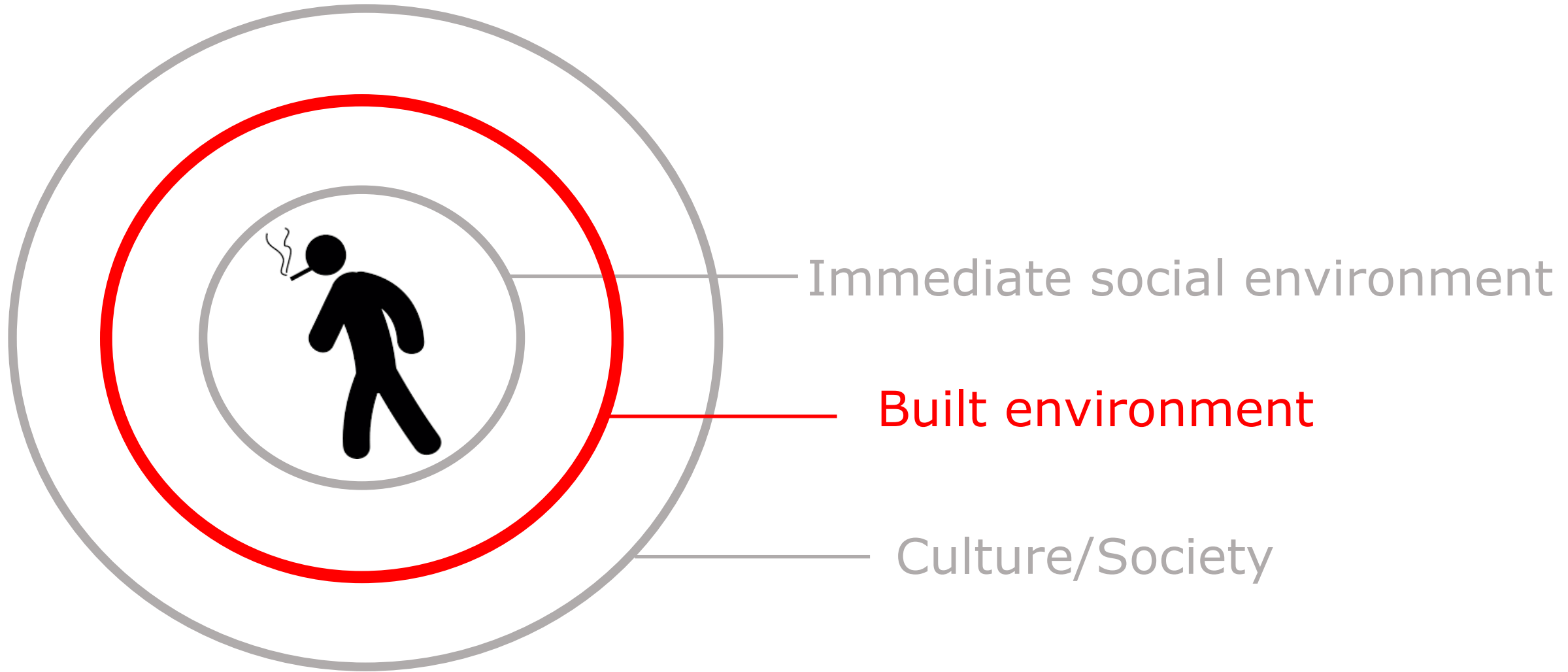
Note: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

# Summary

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- Social norms conceptualized as static variables
- But: Socio-ecological model suggest varying social norms
- EMA to examine effects of time varying social norms on smoking
- Momentary social norms influence smoking

# Summary



# In Progress/ Directions for Future Research

- ✓ Direct measures of social norms developed
- ✓ Modified to suit EMA study
- ✓ In progress: Test new measures in eating context
- ❑ In future: Test measures in smoking context



# Contact

Tina Jahnel

Email: [Tina.Jahnel@utas.edu.au](mailto:Tina.Jahnel@utas.edu.au)



<http://www.utas.edu.au/health-medicine/research/groups/behavioural-and-situational-research-group-bsrg>



[Behavioural and Situational Research Group](#)

